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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/820,858	03/30/2001	David W. Cannell	05725.0844-00	3869

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EXAMINER

FUBARA, BLESSING M

ART UNIT

PAPER NUMBER

1615

DATE MAILED: 01/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application N .	Applicant(s)	
	09/820,858	CANNELL ET AL	
	Examiner	Art Unit	
	Blessing M. Fubara	1615	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondenc address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 November 2002.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) 10-12, 21-23, 27, 28, 30, 32, 34, 36, 48-150 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 13-20, 24-26, 29, 31, 33, 35, 37-48, 151 and 152 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

Examiner acknowledges response, to the office action of 08/27/02, filed 11/14/02. No amendment to the claims was made.

#### *Claim Rejections - 35 USC § 112*

1. Claims 6, 7 and 31 remain rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicants argue that derivatives are well known to one of ordinary skill and provided Marriam-Webster's Collegiate Dictionary definition of derivatives.

2. Applicant's arguments filed 11/14/02 have been fully considered but they are not persuasive.

It is respectfully submitted that the issue is not with the derivatives per se but with derivatives as it defines polysaccharide polymers. The dictionary does not define "derivatives of polysaccharide polymers" or "cationic starch derivatives" or "cationic gum derivatives or derivatives of C<sub>5</sub> to C<sub>7</sub> saccharide units." The disclosure does not say that "cationic starch derivatives" are or by "cationic starch derivatives" we mean. The disclosure does not say that "derivatives of polysaccharide polymers" are or by "derivatives of polysaccharide polymers" we mean.... The disclosure does not say that "cationic gum derivatives" or "derivatives of C<sub>5</sub> to C<sub>7</sub> saccharide units" or by "cationic gum derivatives" or "derivatives of C<sub>5</sub> to C<sub>7</sub> saccharide units" we mean.... One of skill in the art or one of ordinary skill in the art is expected to experiment with all known and yet to be discovered derivatives of polysaccharide polymers, cationic gum

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derivatives or derivatives of C<sub>5</sub> to C<sub>7</sub> saccharide units or cationic starch derivatives and identify the derivatives that would work in applicants' invention. The disclosure does not give directions as to what derivatives of polysaccharide polymers, cationic starch derivatives, cationic gum derivatives and derivatives of C<sub>5</sub> to C<sub>7</sub> saccharide units that would work in applicants' invention.

Applicants may overcome the rejection by either using a Markush language to claim any disclosed "derivatives of polysaccharide polymers", "cationic gum derivatives" or "derivatives of C<sub>5</sub> to C<sub>7</sub> saccharide units" or amend the specification to say "derivatives of polysaccharide polymers" are A, B, C .... The same may be done with "cationic gum derivatives" or "derivatives of C<sub>5</sub> to C<sub>7</sub> saccharide units" or "cationic starch derivatives." What saccharides disclosed in the specification are cationic gum and cationic starch?

3. Claims 6-9, 31 and 33 remain rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants argue that examiner does not state why derivative is indefinite.

4. Applicant's arguments filed 11/14/02 have been fully considered but they are not persuasive.

Contrary to applicants' statement that examiner failed state why derivative is indefinite, it is respectfully submitted that the reason was given on page 3 of the action. The claims do not define what those derivatives are. This statement does not mean literal definition of the term given in the dictionary as provided by applicants. What are the derivatives of derivatives of polysaccharide polymers, cationic gum, C<sub>5</sub> to C<sub>7</sub> saccharide units and cationic starch?

Applicants are respectfully referred to the discussion above.

Applicants may overcome the rejection by using Markush language to recite what those derivatives are or amend the claims to recite polysaccharide polymers, cationic gum, C<sub>5</sub> to C<sub>7</sub> saccharide units or cationic starch without recitation of “derivatives of.”

***Claim Rejections - 35 USC § 102***

5. Claims 1-9, 16, 17, 19, 20, 24-26, 29, 31, 33, 35 and 45-47 remain rejected under 35 U.S.C. 102(b) as being anticipated by Gruber (US 5,597,811).

Applicants argue that Gruber does not anticipate the claims because the claimed subject matter is a method of protecting keratinous fiber from extrinsic damage and that Gruber does not disclose each limitation of claim 1 and 151. Applicants also argue that one arrived at the claimed invention by picking and choosing. Applicants also argue that Gruber does not teach the effective amounts of the claimed compounds.

6. Applicants' arguments filed 11/14/02 have been fully considered but they are not persuasive.

With respect to applicants claim of a method of protecting keratinous fiber from extrinsic damage, it is respectfully submitted that applicants claim a composition and “durably conditioning of at least one keratinous fiber” is intended use and is not critical in the composition claim. Applicants claim a composition and not a method.

With respect to the statement that Gruber does not disclose each limitation of claims 1 and 151, it is respectfully submitted that it is claim 1 that is anticipated by Gruber's composition, Gruber meets the limitations recited in claim 1 and the rejection of the claims is not by picking and choosing. Glucose is a C<sub>6</sub> saccharide. No specific C<sub>5</sub> to C<sub>7</sub> saccharide unit is claimed. Any C<sub>5</sub> to C<sub>7</sub> saccharide unit disclosed in the art would meet that limitation. With respect to

rejection of claim 151, it is respectfully submitted that claim 151 was not rejected under 35 USC 102.

With respect to Gruber not teaching effective amounts of the claimed compounds, it is respectfully submitted that the claims rejected under 35 USC 102 do not recite any effective amounts. And applicants' argument that Gruber does not teach the amounts of the ingredients required to obtain a composition that durably conditions is not pertinent in this section since the rejected claims do not recite that limitation and applicants are arguing limitations that are not recited in the claims rejected under 35 USC 102.

***Claim Rejections - 35 USC § 103***

7. Claims 1-9, 13-20, 24-36, 29, 31, 35 and 37-48 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Dunlop et al. (US 2002/0102228 in view of Gruber (US 5,597,811) and further in view of Yoshihara et al. (US 5,332,581).

Applicants agree that Dunlop lists numerous possibilities of compounds for use in anti-dandruff shampoo and that Dunlop does not guide one to choose a specific compound that has at least two quaternary ammonium groups. Applicants agree that Dunlop rigidly requires 4 conditions that is at odds with Yoshihara and thus Dunlop can not be combined with Yoshihara and that Dunlop can not be combined with Gruber without a clear suggestion.

8. Applicants' arguments filed 11/14/02 have been fully considered but they are not persuasive.

9. At the onset, it is respectfully submitted that applicants' claims are broad and directed to a compound comprising at least two quaternary ammonium groups and there is nothing specific about that limitation since no specific compound having at least two quaternary ammonium

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groups is claimed. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

The combination of Dunlop and Yoshihara is proper because both compositions are used for hair treatment and Yoshihara is relied upon heat activation step. The combination of Dunlop and Gruber is proper because Dunlop is relied upon for glucosamine and polyquaternium and both composition are used for the same purpose.

10. Claims 151 and 152 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Dunlop et al. (US 2002/0102228) in view of Rath et al. (US 5,993,792).

11. Applicants' arguments filed 11/14/02 have been fully considered but they are not persuasive.

Applicants argue that the combination because it does not teach all the limitations but a combination of the prior art teaches the limitations. Rath is relied upon for teaching kits and any compartment would be a first or second in the claims. Secondly, one compartment holds the saccharide and the other holds the surfactant there is no recitation of the order of first or second.

12. Claims 14, 15 and 39-44 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Gruber (US 5,597,811) in view of applicants admitted prior art.

13. Applicants' arguments filed 11/14/02 have been fully considered but they are not persuasive.

Applicants argue that Gruber does not teach the need for hair mousses to impart "such properties on the hair." It is respectfully noted that in a composition claim, future intended use is not critical and Gruber teaches the limitations of claim 1 as stated previously in this communication. Secondly compositions have inherent properties. Applicants argue that the specification at page 3, line 5-15 discusses the use of sugars in hair care compositions to impart certain properties and does not provide specific motivation to add these improvements to mousses and thus examiner failed to establish prima facie case of obviousness.

Gruber teaches applicants' composition. Both compositions are used with hair. The suggestions by applicants' admission that sugars improve tactile and elastic properties of natural hair provides motivation to add sugars the hair formulations to improve the elastic and tactile properties of the hair.

As it regards the amounts of quaternary ammonium groups, it is not inventive to certain amounts of the surfactant absent a showing that such amounts are critical in the compositions. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover optimum workable ranges or amounts by routine experimentation."

Other Matters: Applicants indicate in the remarks that claims 1-9, 13-20, 24-26, 29, 31, 33, 35, 37-48, 151 and 151 are pending. If applicants want to cancel non-elected claims that are withdrawn from consideration, applicants may properly cancel those claims by amendment.

No claim is allowed.



14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blessing M. Fubara whose telephone number is 703-308-8374. The examiner can normally be reached on 7 a.m. to 3:30 p.m. (Monday to Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page can be reached on 703-308-2927. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3592 for regular communications and 703-305-3592 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1234.

Blessing Fubara  
January 13, 2003

**THURMAN K. PAGE**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 1600**